

Donnerstag
DEPUTY CHIEF

JICARILLA APACHE TRIBE
ENVIRONMENTAL PROTECTION OFFICE
P.O. BOX 507
DULCE, NEW MEXICO 87528

CAGH1 OK
SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION
R. J.

PIT REMEDIATION AND CLOSURE REPORT

Operator: CONOCO, INC. Telephone: (505) 324-5884
Address: 3315 Bloomfield Hwy., Farmington, NM 87401
Facility or Well Name: JICARILLA BR E #10
Location: Unit or Qtr/Qtr Sec E Sec 18 T 25N R 4W County RIO ARRIAGA
Pit Type: Separator ☒ Dehydrator ☐ Other ☐
Land Type: RANGE

Pit Location: Pit dimensions: length 13', width 15', depth 6'
(Attach diagram) Reference: wellhead ☒, other ☐
Footage from reference: 14'
Direction from reference: 48 Degrees ☐ East of North ☐
☒ West of South ☒

Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of groundwater)	Less than 50 feet	(20 points)	
	50 feet to 99 feet	(10 points)	
	Greater than 100 feet	(0 points)	<u>0</u>
Distance to an Ephemeral Stream (Downgradient dry wash greater than ten feet in width)	Less than 100 feet	(10 points)	
	Greater than 100 feet	(0 points)	<u>0</u>
Distance to Nearest Lake, Playa, or Watering Pond (Downgradient lakes, playas and livestock or wildlife watering ponds)	Less than 100 feet	(10 points)	
	Greater than 100 feet	(0 points)	<u>0</u>
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or: less than 1000 feet from all other water sources)	Yes	(20 points)	
	No	(0 points)	<u>0</u>
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 100 feet	(20 points)	
	100 feet to 1000 feet	(10 points)	<u>0</u>
	Greater than 1000 feet	(0 points)	

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: _____ Date Completed: 9/21/98

Remediation Method: Excavation X Approx. cubic yards 40
Check all appropriate sections) Landfarmed X Insitu Bioremediation _____
Other _____

Remediation Location: Onsite X Offsite _____
(i.e. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: Excavation. EXCAVATION MOSTLY BEDROCK,
THEREFORE NO TPH ANALYSIS WAS CONDUCTED. RISK ASSESSED.

Groundwater Encountered: No X Yes _____ Depth _____

Final Pit: Sample location see Attached Documents

Closure Sampling: _____
(if multiple samples, attach sample results and diagram of sample locations and depths)

Sample depth 3' (EAST SIDEWALL)

Sample date 9/21/98 Sample time 1000

Sample Results

Soil: Benzene	(ppm)	_____	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	_____	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>458</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>NA</u>	Total Xylenes	(ppb)	_____

Groundwater Sample: Yes _____ No X (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 9/21/98 PRINTED NAME Jeffrey C. Blagg, P.E. #11607



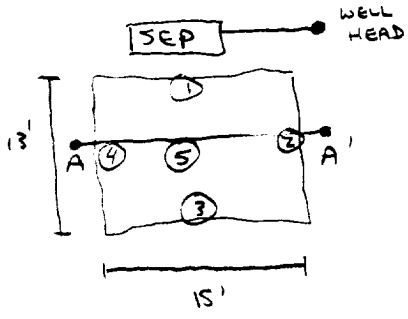
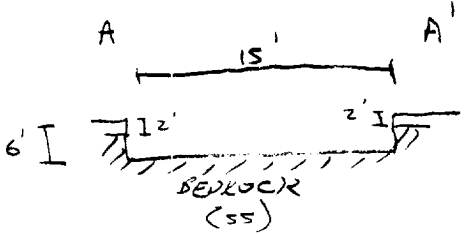
SIGNATURE Jeffrey C. Blagg AND TITLE President

AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO _____ (REASON) _____

SIGNED: Karen C. M... DATE: 10-1-98

3003906017

CLIENT: <u>CONOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>CA641</u> C.O.C. NO: _____																																								
FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>																																								
LOCATION: NAME: <u>JCARUA BR E</u> WELL #: <u>10</u> PIT: <u>SEP.</u>		DATE STARTED: <u>9/21/98</u> DATE FINISHED: _____																																								
QUAD/UNIT: <u>E</u> SEC: <u>18</u> TWP: <u>25N</u> RNG: <u>4W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>		ENVIRONMENTAL SPECIALIST: <u>NV</u>																																								
QTR/FOOTAGE: <u>1650' FNL / 990' FWL</u> CONTRACTOR: <u>JVC</u>																																										
EXCAVATION APPROX. <u>13</u> FT. x <u>15</u> FT. x <u>6</u> FT. DEEP. CUBIC YARDAGE: <u>40</u>																																										
DISPOSAL FACILITY: <u>ON-SITE</u> REMEDIATION METHOD: <u>LANDFARM</u>																																										
LAND USE: <u>RANGE</u> LEASE: <u>CONTRACT # 64</u> FORMATION: <u>PC</u>																																										
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>14</u> FT. <u>548W</u> FROM WELLHEAD.																																										
DEPTH TO GROUNDWATER: <u>>100'</u> NEAREST WATER SOURCE: <u>>1000'</u> NEAREST SURFACE WATER: <u>>1000'</u>																																										
NMOC PARKING SCORE: <u>0</u> NMOC TPH CLOSURE STD: <u>5000</u> PPM																																										
SOIL AND EXCAVATION DESCRIPTION:		CHECK ONE: <input checked="" type="checkbox"/> PIT ABANDONED <input type="checkbox"/> STEEL TANK INSTALLED <input type="checkbox"/> FIBERGLASS TANK INSTALLED																																								
EXCAVATION CONSISTED OF MOSTLY BEDROCK (SANDSTONE) VARYING COLOR FROM DR. YELL. ORANGE TO BLACK, PREDOMINATELY LT. TO MED. GRAY, VERY HARD, STAINED THROUGHOUT ENTIRE EXCAVATION HC ODOR DETECTED w/in EXCAVATION STRONG HC ODOR IN ALL GUM SAMPLES EXCEPT PIT BOTTOM, ALL SAMPLES COLLECTED FROM BEDROCK, THEREFORE NO TPH ANALYSIS WAS CONDUCTED.																																										
EXCAVATION MOSTLY BEDROCK SCALE  0 FT	RISK ASSESSED FIELD 418.1 CALCULATIONS <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>TIME</th> <th>SAMPLE I.D.</th> <th>LAB No:</th> <th>WEIGHT (g)</th> <th>mL. FREON</th> <th>DILUTION</th> <th>READING</th> <th>CALC. ppm</th> </tr> </thead> <tbody> <tr> <td>1000</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr><td> </td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td> </td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td> </td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>		TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm	1000																															
TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm																																			
1000																																										
PIT PERIMETER  	OVM RESULTS <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>FIELD HEADSPACE PID (ppm)</th> </tr> </thead> <tbody> <tr><td>1 @ 3'</td><td>209.7</td></tr> <tr><td>2 @ 3'</td><td>458</td></tr> <tr><td>3 @ 3'</td><td>307</td></tr> <tr><td>4 @ 3'</td><td>444</td></tr> <tr><td>5 @ 6'</td><td>32.7</td></tr> <tr><td> </td><td></td></tr> <tr><td> </td><td></td></tr> <tr><td> </td><td></td></tr> <tr><td> </td><td></td></tr> <tr><td> </td><td></td></tr> </tbody> </table> LAB SAMPLES <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>ANALYSIS</th> <th>TIME</th> </tr> </thead> <tbody> <tr><td> </td><td></td><td></td></tr> <tr><td> </td><td></td><td></td></tr> <tr><td> </td><td></td><td></td></tr> <tr><td> </td><td></td><td></td></tr> <tr><td> </td><td></td><td></td></tr> </tbody> </table>		SAMPLE ID	FIELD HEADSPACE PID (ppm)	1 @ 3'	209.7	2 @ 3'	458	3 @ 3'	307	4 @ 3'	444	5 @ 6'	32.7											SAMPLE ID	ANALYSIS	TIME															
SAMPLE ID	FIELD HEADSPACE PID (ppm)																																									
1 @ 3'	209.7																																									
2 @ 3'	458																																									
3 @ 3'	307																																									
4 @ 3'	444																																									
5 @ 6'	32.7																																									
SAMPLE ID	ANALYSIS	TIME																																								
PIT PROFILE 																																										
TRAVEL NOTES: CALLOUT: <u>9/18/98 - AFTER.</u> ONSITE: <u>9/21/98 - MORN.</u>																																										

Well Name:

Well Site location:

Pit Type:

Producing Formation:

Pit Category:

Horizontal Distance to Surface Water:

Vicinity Groundwater Depth:

Jicarilla BR E #10

Unit E, Sec. 18, T25N, R4W

Separator Pit

Pictured Cliffs

Non Vulnerable

> 1000 ft.

> 100 ft.

RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 6 feet below grade.

No past or future threat to surface water or groundwater is likely based on the following considerations:

1. Past production fluids were contained locally by a relatively shallow sandstone bedrock located 6 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below sandstone bedrock.
2. Topographic information does not indicate off site lateral fluid migration near the earthen pit.
3. Daily discharge into the earthen pit has been terminated (pit abandoned). Prior discharge into the pit is believed to be under 5 barrels per day.
4. Well site located within the **non-vulnerable area** and is approximately 0.36 miles northwest of the nearest vulnerable area boundary (Gonzales Canyon wash).

(Refer to Lapis Point Quadrangle, New Mexico - Rio Arriba County, 7.5 Minute Series (Topographic), 1963, (vulnerable area boundary developed by Mr. William C. Olson, Hydrogeologist, Environmental Bureau, New Mexico Oil Conservation Division).

Based upon the information given, we conclude that the subsurface lateral impact from the earthen pit is very limited and that the sandstone bottom creates enough of an impermeable barrier as to subdue impact to groundwater below it (please refer to AMOCO's report "Post Excavation Pit Closure Investigation Summary, July, 1995", with cover letter dated November 30, 1995). CONOCO requests pit closure approval on this location.

JICARILLA APACHE TRIBE
ENVIRONMENTAL PROTECTION OFFICE
P.O. BOX 507
DULCE, NEW MEXICO 87528

CA641

SUBMIT 1 COPY TO
NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: Conoco, Inc. Telephone: (505) 324-5884
Address: 3315 Bloomfield Hwy., Farmington, NM 87401
Facility or Well Name: JICARILLA BR E #10
Location: Unit or Qtr/Qtr Sec E Sec 18 T 25N R 4W County RIO ARriba
Land Type: RANGE

Date Remediation Started: 9/21/98 Date Completed: 4/19/99 ^{nm}
Remediation Method: Landfarmed ✓ Approx. cubic yards 40
Composted
Other

Depth To Groundwater: (pts.) 0
Distance to an Ephemeral Stream (pts.) 0
Distance to Nearest Lake, Playa, or Watering Pond (pts.) 0
Wellhead Protection Area: (pts.) 0
Distance To Surface Water: (pts.) 0
RANKING SCORE (TOTAL POINTS): 0

Final Closure Sampling:

Sampling Date: 4/15/99 Time: 0955
Sample Results:
Field Headspace (ppm) 0.0
TPH (ppm) 1.3 Method 8015
Other

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 4/19/99 PRINTED NAME Jeffrey C. Blagg, P.E. #11607
SIGNATURE Jeffrey C. Blagg AND TITLE President

AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO (REASON)

SIGNED: Ken C. M... DATE: 6-3-99

1 1 1

CON

BLACK ENGINEERING INC

CLIENT <u>CONOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>CAG41</u> C.O.C. NO: <u>6651</u>
----------------------	--	---

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION NAME <u>JCARILA BR</u>	E WELL #: <u>10</u>	PITS: <u>SEP</u>	DATE STARTED: <u>4/15/99</u>
QUAD/UNIT: <u>E</u>	SEC: <u>18</u>	TWP: <u>25N</u> RNG: <u>4W</u>	PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>
STR/ESTAGE: <u>5014 NW14</u>	CONTRACTOR: <u>JUC</u>	ENVIRONMENTAL SPECIALIST: <u>NV</u>	

SOIL REMEDIATION:

REMEDICATION SYSTEM: LANDFARM APPROX. CUBIC YARDAGE: 40
LAND USE: RANGE LIFT DEPTH (ft): 1

FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
WELL BAKING SCORE: 0 NMCD TPH CLOSURE STD: 5000 PPM 9/21/98

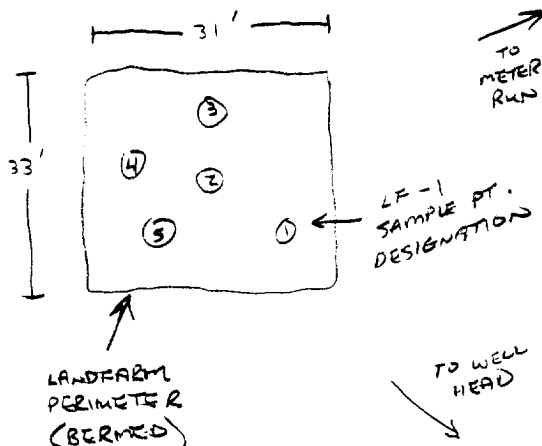
SOIL MOSTLY PALE YELL. ORANGE TO DK. OLIVE GRAY SAND WITH SANDSTONE BEDROCK FRAGMENTS, NON COHESIVE, SLIGHTLY MOIST, FIRM, SAMPLING DEPTHS RANGE FROM 6 TO 12 INCHES, NO APPARENT STRAINING OBSERVED, NO APPARENT HC ODOOR DETECTED @ ANY OF THE SAMPLING PTS., COLLECTED 5 PT. COMPOSITE SAMPLE FOR LAB ANALYSIS.

CLOSED

FIELD 418.1 CALCULATIONS

SAMP. TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

SKETCH/SAMPLE LOCATIONS ↑ N



OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE P/D (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	0.0	LF-1	TPH (8015)	0955	1.3

SCALE

0 FT

TRAVEL NOTES:

CALLOUT: NA

ONSITE: 4/15/99

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / CONOCO
Sample ID: LF - 1
Laboratory Number: F044
Chain of Custody No: 6651
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

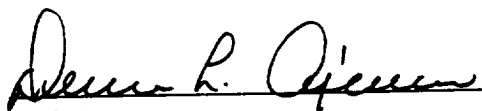
Project #: 403410
Date Reported: 04-19-99
Date Sampled: 04-15-99
Date Received: 04-16-99
Date Extracted: 04-16-99
Date Analyzed: 04-17-99
Analysis Requested: 8015 TPH

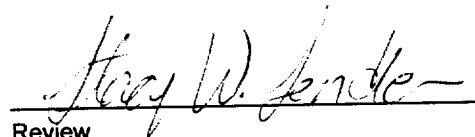
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.5	0.2
Diesel Range (C10 - C28)	0.8	0.1
Total Petroleum Hydrocarbons	1.3	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Jicarilla BR E #10 Landfarm. 5 Pt. Composite.


Analyst


Review

6651

[illegible]